

Press Information

Liebherr fast-erecting crane on the island of Mainau

- In operation to restore a heritage wall
- Assembly of L1-24 crane in challenging conditions

A Liebherr L1-24 fast-erecting crane is being used to ensure the fastest possible rebuilding of a collapsed heritage wall on the island of Mainau. From the outset, special emphasis has been placed on ensuring that the island's tourism trade won't be affected.

Biberach/Riß (Germany), 11 June 2021 – The island of Mainau in Southern Germany is known as Lake Constance's "flowering isle" and shares its stunning vegetation with visitors from all around the world. Amongst its many attractions, the island is home to Germany's second-largest butterfly house and its world-famous rose garden. It is here that a 20-metre-long section of a historic wall suffered damage through ill-fated building work.

In order for the restoration to begin, all damaged pieces of wall have to be lifted separately and removed. The stone masonry and sculpture company Eduard Schnell decided on a Liebherr L1-24 fast-erecting crane to carry out this work. It is being provided by the Liebherr rental fleet based in the Upper Swabia – Lake Constance area. Markus Zeiler, Head of Gardens at Mainau GmbH, emphasises, "It was important to us that everything related to this project runs smoothly. We ensure that everything we do here on Mainau is absolutely environmentally responsible and doesn't interfere with the visitor experience." So, in addition to its technical specifications and reliability, the crane's multi-award-winning design was also one of the criteria for choosing the L1-24.

A different kind of building site

In the run-up to the crane's assembly, all those involved were made aware that conditions would be different from those on an average construction site. Before assembly began, the ground under where the crane was to be installed was assessed by the BfB-Büro für Baukonstruktionen in Karlsruhe, as the crane was to be positioned directly on top of the backfill of a historic rampart wall and useful information regarding the walls and their backfill wasn't available.

Access arrangements were also clarified in detail. The site can only be reached via a bridge, the weight limit of which is insufficient for a tractor vehicle towing ballast and the crane. On the day of assembly, the fast-erecting crane was transported over the bridge using one of Mainau's own tractors, towed past the castle and then assembled by service technicians at the Liebherr site in Stockach. As the condition of the substrate couldn't be specified with absolute certainty, the best possible precautionary measures were taken. Large-format steel plates were placed under the supports to keep the corner pressure points

as minimal as possible. The crane was also positioned as far as possible from the collapsed section of wall.

Safety first

As the island of Mainau is now open to the public again, additional safety measures were put in place regarding visitors. Liebherr's sales and rental partner had an ABB operating range limiting system installed in the crane specifically for this purpose. Thanks to the fast-erecting crane's state-of-the-art control system, this was programmed on site in no time at all. The ABB system prevents the crane from overshooting defined areas with its load. This means that the stone masonry company's employees can go about their work knowing the safety of the island's visitors is ensured.

It will be several months before the historic wall is restored to its former glory. Until then, the island of Mainau has an extra attraction – a L1-24 fast-erecting crane.

About the Liebherr Tower Cranes Division

More than seven decades of experience have made Liebherr a recognised specialist for lifting technology on all types of construction sites. The range of Liebherr Tower Cranes encompasses an extensive selection of high-quality tower cranes that are used worldwide. This includes fast-erecting, top-slewing, luffing jib and special-purpose cranes as well as mobile construction cranes. In addition to these products, Liebherr also offers a wide range of services that complete the company's portfolio: Tower Crane Solutions, Tower Crane Customer Service and the Tower Crane Center.

About the Liebherr Group

The Liebherr Group is a family-run technology company with a highly diversified product portfolio. The company is not only one of the largest construction equipment manufacturers in the world, but also provides high-quality and user-oriented products and services in a wide range of other areas. Today, the Group consists of more than 140 companies across all continents, employs around 48,000 people and, in 2020, achieved a total turnover of over 10.3 billion euros. Liebherr has pursued its goal of satisfying customers with industry-leading solutions and shaping technological progress since its founding in 1949, in Kirchdorf an der Iller in Southern Germany.

Images



liebherr-l1-24-insel-mainau-01.jpg

Renovation of a heritage wall on the island of Mainau with the help of a Liebherr L1-24.



liebherr-l1-24-insel-mainau-02.jpg

Unusual assembly: The L1-24 is erected on the backfill of a historic rampart wall on the island of Mainau.

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